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09/638,271	08/14/2000	Dinesh Nair	5150-43600	9604
35690	7590	12/28/2004	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			BURLESON, MICHAEL L	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/638,271

Applicant(s)

NAIR ET AL.

Examiner

Michael Burleson

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-13, 16-24, 29-34 and 41-45 is/are allowed.
- 6) ☐ Claim(s) 1-3, 14, 15, 25-28, 35-40 and 46-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**Response to Amendment**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,14,15,25,26,38 and 46-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Fadel US 6597736.

Regarding claim 1, Fadel teaches of capturing a user's image using a camera (10) connected to a computer (14) (column 5, lines 48-50). Fadel teaches of a color-mapped image that is produced by applying a color matching process, in which regions are identified of the target image (column 6, lines 39-60). Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6). This reads on a computer-implemented method for locating regions of a target image that match a template image with respect to color and pattern information, the method comprising of performing a color matching search through the target image in order to find one or more candidate color match regions, wherein the candidate color match color regions match the template image with

respect to color information for each candidate color match region found in the color matching search, performing a pattern matching search of a proximal region proximal to the color match region in order to find one or more match regions in the target image, wherein the one or more match regions found in the pattern matching search of each proximal region match the template image with respect of color and pattern information.

Regarding claim 14, Fadel teaches of a camera (10), which captures the image and is connected to a computer (14). This reads on the target image is received from one of the group consisting of a memory, a hardware device and a software application.

Regarding claim 15, Fadel teaches that video images are represented by a pixel image (column 8, lines 11-13). He teaches that the face matching process matches regions of identified regions of the color mapped image (column 6, lines 61-67 and figure 5), which reads on characterizing pattern information of the template image, wherein the characterizing comprises sampling the template image to determine a first plurality of sample pixels, wherein the first plurality of sample pixels comprises a subset, but not all, of the pixels of the template image, wherein said performing a pattern matching search of a region surrounding each candidate color match region uses the first plurality of sample pixels.

Regarding claim 25, Fadel teaches that the color-mapped image (110) contains four regions to be matched (column 6, lines 39-50), which reads on each of the proximal regions surrounds its respective color match region.

Regarding claim 26, Fadel teaches of a computer (14) and a memory (64), which processes the video images (62) using mapping and template techniques (column

Art Unit: 2626

5, lines 63-67 and column 6, lines 16-22). Fadel teaches of capturing a user's image using a camera (10) connected to a computer (14) (column 5, lines 48-50). Fadel teaches of a color-mapped image that is produced by applying a color matching process, in which regions are identified of the target image (column 6, lines 39-60). Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6). This reads on a system for locating regions of a target image that match a template image with respect to color and pattern information, the method comprising of a processor, a memory medium coupled to the processor, wherein the memory medium stores color/pattern matching software; wherein the processor is operable to execute the color/pattern matching software to perform a color matching search through the target image in order to find one or more candidate color match regions, wherein the candidate color match color regions match the template image with respect to color information for each candidate color match region found in the color matching search, performing a pattern matching search of a proximal region proximal to the color match region in order to find one or more match regions in the target image, wherein the one or more match regions found in the pattern matching search of each proximal region match the template image with respect of color and pattern information.

Regarding claim 38, Fadel teaches of a computer (14) and a memory (64), which processes the video images (62) using mapping and template techniques (column 5, lines 63-67 and column 6, lines 16-22). Fadel teaches of capturing a user's image

Art Unit: 2626

using a camera (10) connected to a computer (14) (column 5, lines 48-50). Fadel teaches of a color-mapped image that is produced by applying a color matching process, in which regions are identified of the target image (column 6, lines 39-60). Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6). This reads on a memory medium comprising program instructions for locating regions of a target image that match a template image with respect to color and pattern information, wherein the program instructions are executable to implement, performing a color matching search through the target image in order to find one or more candidate color match regions, wherein the candidate color match color regions match the template image with respect to color information for each candidate color match region found in the color matching search, performing a pattern matching search of a proximal region proximal to the color match region in order to find one or more match regions in the target image, wherein the one or more match regions found in the pattern matching search of each proximal region match the template image with respect of color and pattern information.

Regarding claim 46, Fadel teaches of capturing a user's image using a camera (10) connected to a computer (14) (column 5, lines 48-50). Fadel teaches of a color-mapped image that is produced by applying a color matching process, in which regions are identified of the target image (column 6, lines 39-60). Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions

Art Unit: 2626

of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6). This reads on a computer-implemented method for locating regions of a target image that match a template image with respect to color and pattern information, the method comprising: performing a color matching search through the target image in order to find one or more color match regions, wherein the one or more color match color regions match the template image with respect to color information; performing a pattern matching search through the target image in order to find one or more pattern match regions in the target image; determining one or more final match regions using the one or more color match color regions and the one or more pattern match regions.

Regarding claim 47, Fadel teaches that the color-mapped image (110) identifies regions that contain colors to be identified (column 6, lines 45-47) and teaches that the face shape matching procedure attempts to match identified regions of the color mapped image (column 6, lines 65-67). This reads on correlating the one or more color match regions and the one or more pattern match regions to determine the one or more final match regions.

Regarding claim 48, Fadel teaches that the color mapped image (110) identifies regions that contain colors in a flesh-tone range, to be identified (column 6, lines 45-47 and column 6, lines 50-58) and teaches that the face shape matching procedure attempts to match identified regions of the color mapped image to oval shapes (column 6, lines 65-67 and column 6, lines 50-58). This reads on correlating includes determining

Art Unit: 2626

final match regions that have both color match and pattern match characteristics according to a desired degree.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 2,3,27,28,39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fadel US 6597736 in view of Ringland et al. US 6122391.

Regarding claim 2, Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6), which reads on a match region that matches the template image with respect to color and pattern information.

Fadel fails to teach to of a graphical user interface indicating the location of the match region within the target image.

Ringland et al. teaches of a graphical user interface where items can be selected by pointing to the graphical representation on the display screen (column 15, lines 34-



Art Unit: 2626

43), which reads on a graphical user interface indicating the location of the match region within the target image.

Fadel could have easily been modified to contain the graphical user interface of Ringland et al. This modification would have been obvious to one skilled in the art at the time of the invention to compare the color and patterns of the target image

Regarding claim 3, claim 3 is rejected for the same reasons as claim 2.

Regarding claim 27, Fadel teaches of a computer (14) and a memory (64), which processes the video images (62) using mapping and template techniques (column 5, lines 63-67 and column 6, lines 16-22). Fadel teaches of capturing a user's image using a camera (10) connected to a computer (14) (column 5, lines 48-50). Fadel teaches of a color-mapped image that is produced by applying a color matching process, in which regions are identified of the target image (column 6, lines 39-60). Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6). This reads on a system for locating regions of a target image that match a template image with respect to color and pattern information, the method comprising of a processor, a memory medium coupled to the processor, wherein the memory medium stores color/pattern matching software; wherein the processor is operable to execute the color/pattern matching software to perform a color matching search through the target

Art Unit: 2626

image in order to find one or more candidate color match regions, wherein the candidate color match color regions match the template image with respect to color information for each candidate color match region found in the color matching search, performing a pattern matching search of a proximal region proximal to the color match region in order to find one or more match regions in the target image, wherein the one or more match regions found in the pattern matching search of each proximal region match the template image with respect of color and pattern information.

Fadel fails to teach of displaying information on a graphical user interface indicating the location of the match region within the target image.

Ringland et al. teaches of a graphical user interface where items can be selected by pointing to the graphical representation on the display screen (column 15, lines 34-43), which reads on a display for displaying information on a graphical user interface indicating the location of the match region within the target image.

Fadel could have easily been modified to contain the graphical user interface of Ringland et al. This modification would have been obvious to one skilled in the art at the time of the invention to compare the color and patterns of the target image.

Regarding claim 28, Fadel teaches on a display (12), in which the video image, where the color and pattern matching process are performed, is displayed (column 5, lines 61-67). This reads on a display, wherein for each match region found that matches the template image with respect to color and pattern information.

Fadel fails to teach of displaying information on a graphical user interface indicating the location of the match region within the target image.

Ringland et al. teaches of a graphical user interface where items can be selected by pointing to the graphical representation on the display screen (column 15, lines 34-43), which reads on a display for displaying information on a graphical user interface indicating the location of the match region within the target image.

Fadel could have easily been modified to contain the graphical user interface of Ringland et al. This modification would have been obvious to one skilled in the art at the time of the invention to compare the color and patterns of the target image.

Regarding claim 39, Fadel teaches of applying a face shape matching procedure to a color mapped image by matching identified regions of the color mapped image to shapes to create face template image (column 6, lines 63-67 and column 7, lines 1-3 and figures 3-6), which reads on program instructions that implement for each match region found that matches the template image with respect to color and pattern information.

Fadel fails to teach to of a graphical user interface indicating the location of the match region within the target image.

Ringland et al. teaches of a graphical user interface where items can be selected by pointing to the graphical representation on the display screen (column 15, lines 34-43), which reads on a graphical user interface indicating the location of the match region within the target image.

Fadel could have easily been modified to contain the graphical user interface of Ringland et al. This modification would have been obvious to one skilled in the art at the time of the invention to compare the color and patterns of the target image.

Regarding claim 40, Fadel teaches on a display (12), in which the video image, where the color and pattern matching process are performed, is displayed (column 5, lines 61-67). This reads on a display, wherein for each match region found that matches the template image with respect to color and pattern information.

Fadel fails to teach of displaying information on a graphical user interface indicating the location of the match region within the target image.

Ringland et al. teaches of a graphical user interface where items can be selected by pointing to the graphical representation on the display screen (column 15, lines 34-43), which reads on a display for displaying information on a graphical user interface indicating the location of the match region within the target image.

Fadel could have easily been modified to contain the graphical user interface of Ringland et al. This modification would have been obvious to one skilled in the art at the time of the invention to compare the color and patterns of the target image.

#### ***Allowable Subject Matter***

2. Claims 4-13, 16-24, 29-34 and 41- 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

1. Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (703) 305-8683 and fax number is (703) 746-3006. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at (703) 305-4863

Michael Burleson  
Patent Examiner  
Art Unit 2626

MB

KAW Williams

KIMBERLY WILLIAMS  
SUPERVISORY PATENT EXAMINER

Mlb  
December 2, 2004